THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION OF

MILLER et al.

Group Art Unit: 3643

Appln. No.: 09/682,247

Examiner: K. ROWAN

Filed: August 9, 2001

Title: COUNTERFLOW INSECT TRAP

CHOUNG TON TO SECONO

**DECLARATION TRAVERSING REJECTIONS UNDER 37 C.F.R. § 1** 

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The undersigned is the President of American Biophysics Corporation ("ABC"), which is the assignee of United States Patent Application No. 09/682,247 ("the '247 application") for the Counterflow Insect Trap. ABC is engaged in the manufacture and sale of insect traps, and in particular of counterflow insect traps embodying the subject matter claimed in accordance with the '247 application.

Included below as Table 1 is a list of counterflow insect traps (branded the "Mosquito Magnet") sold by ABC between March 1998 and June 30, 2003. A total of 313,246 traps have been sold during that time period with a projected sales number for the end of 2003 of 389,743. From the chart, it is evident that sales have increased each year from 1998, despite the introduction to the marketplace of several competing brands of trap.

The counterflow insect traps sold were constructed according to the disclosure and claims of the present application. The traps sold all use "counterflow" technology to attract and capture insects where "counterflow" means providing an outflow comprised of air and an insect attractant out of the device to atmosphere and an inflow directed counter to the outflow, insects being urged into the device by the inflow. The counterflow insect traps are especially effective at trapping blood-seeking insects such as mosquitoes, no-see-ums, black flies and sand flies. The traps range in price from about \$260.00 to about \$1,295.00.

Specifically, ABC's Mosquito Magnet sales are shown below in Table 1:

## 1998-2003 Unit Sales

	1998	1999	2000	2001	2002	2003 YTD	2003 Rest of	Total	Retail \$
						6/30/03	Year (Forecast)		
PRO	75	582	3,825	_15,913	27,915	13,390	3,135	64,835	\$1,295
Freedom	0	0	835	15,759	18,193	0	0	34,787	\$795
Liberty	0	0	0	0	60,422	62,052	15,871	138,345	\$495
Defender	0	0	0	0	0	84,781	57,491	142,272	\$295
Garden Edition	0	0	0	0	0	9,504	0	9,504	\$260
Total	75	582	4,660	31,672	106,530	169,727	76,497		
Total Projected 2003									
246,224									
Total Units Sold								313,246	
Projected Sales End of 2003									

## TABLE 1

As may be seen from Table 1, ABC has experienced tremendous unit sales growth from year to year. From 1998 to 1999, unit sales increased by 676%, from 1999 to 2000 by 700%, from 2000 to 2001 by 579%, and from 2001 to 2002 by 236%. Unit sales for 2003 are projected to increase from 2002 sales by a further 131%. In all, unit sales have grown over the five year period beginning in 1998 by a factor of nearly 3000.

Prior to ABC's introduction of counterflow insect traps into the market, I know of no flying insects traps that were sold commercially to the general public in the \$1,000.00 price range. At the time ABC began selling its counterflow traps, flying insect traps and killing devices such as "bug zappers" and similar devices, were priced in the vicinity of approximately \$50.00 to \$80.00. As noted above, the price of ABC's traps ranges between \$260 and \$1295, and for the first four years of sales, the price was between \$795 and \$1295. During those first four years, despite the fact that the ABC traps cost 10-25 times as much as other devices on the marketplace (i.e., those devices mentioned above in the \$50-80 price range), ABC experienced an average annual growth rate of 600% in its unit sales of counterflow insect traps. Further, in the years 2001 and 2002, when ABC began introducing lower priced counterflow insect traps, ABC still experienced growth rates of 236% and 131%, respectively. Still, those lower priced counterflow insect traps are priced significantly higher than the other devices on the market in the \$50-\$80 price range.

Given the large disparity in price between ABC's counterflow insect trap and other devices on the market, it is evident from the rapid growth shown above in Table 1, that ABC's counterflow trap works substantially better than any alternatives available in the marketplace. Along with the "bug zapper" type traps, the industry standard was the "CDC light trap," developed by the Centers for Disease Control in the 1960s. These types of traps also cost on the order of \$100 or less, much less than the ABC traps listed above and similar to the bug zapper traps. Customers have been willing to pay between five and 20 times the price of many of the other devices that were on the market (e.g., the \$50 to \$80 devices mentioned above). This success came about because the ABC counterflow traps work substantially better than other devices because the ABC traps capture and eliminate large numbers of insects.

## MILLER et al. -- Appln. No. <u>09/682,247</u>

Because of the effectiveness of the ABC devices in catching blood-seeking flying insects, particularly mosquitoes, no-see-ums, black flies and sand flies, ABC, as a newcomer to the commercial market as discussed above, has been able to sell 313,246 traps to date. Total retail sales of well over one hundred million dollars have been made. The unit sales continue to increase steadily despite several years of continuous growth and the introduction of additional competing products. The commercial success of the ABC traps is clear.

As verified by Dr. Kline of the United States Agriculture Department in a letter sent to ABC in October of 1998 and attached to this affidavit, the success of the device in capturing large numbers of insects appears is due to the counterflow technology. The trap captures large numbers of blood-seeking flying insects by attracting them to the trap using an outflow of air containing an insect attractant that causes the insects to fly along the edge of the attractant and the insects are urged into the device with the inflow.

Various models of the Mosquito Magnet, a brand name for ABC's traps, have been favorably tested and reviewed in the Wall Street Journal (July 20, 2001), Consumer Reports (May, 2003), The Boston Globe (July 6, 2001; July 2, 2003), The Miami Herald (July 22, 2002), and The Washington Post (July 14, 2002; July 18, 2002).

In five independent studies, models of the Mosquito Magnet were found to be more effective than competitors' products. These studies were performed by the Cayman Islands Mosquito Research & Control Unit; Florida A&M University; Tayor Envitonmental and Biological Specialists; University of North Dakota; and U.S. Army Medical Command in conjunction with the Centers for Disease Control. Attached to this affidavit is a sheet summarizing the five studies.

The undersigned acknowledges that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon. All statement made based on the declarants's own knowledge and all statements made on information and belief are believed true.

Raymond Iannetta, President American Biophysics Corporation

Date: July 3, 2003